

# NOAA, NATIONAL WEATHER SERVICE, WEATHER FORECAST OFFICE Miami, Florida 33165

### **South Florida Holiday Outlook**

(Updated December 23rd, 2012)

South Florida will return to warmer temperatures just in time for Christmas Day, with the next cold front passing the area early Thursday the 27<sup>th</sup>. Only a slight chance of showers will accompany this next front (similar to last week's front), with only slight cooling to near-normal temperatures for week's end (see tables below for seasonal normals).

Models are indicating another cold front moving through south Florida late Saturday the 29<sup>th</sup> or early Sunday the 30<sup>th</sup>. This front could be stronger than the one later this week, and temperatures may drop to below the seasonal normals in time for New Year's Eve and New Year's Day. Once again, rainfall with this system appears to be rather limited

Looking into the first week of 2013, the <u>NOAA Climate Prediction Center outlook</u> calls for the likelihood of both near normal temperatures and precipitation. Keep in mind, however, that these longer-range outlooks depict general trends and not day-to-day weather and are prone to larger errors the farther out in time you go. For the latest 7-day forecasts, make sure to visit the NWS Miami website at <u>weather.gov/southflorida</u> and clicking on the lower map in the front page for a detailed point forecast. You can also get a forecast for another part of the country by typing in a zip code or city and state in the white bar at the top left of the front page.

#### **Holiday Climatology/Averages**

South Florida weather during the December/early January holiday period is world-renowned for its typically dry and pleasant conditions. Average temperatures for the holiday period through New Years are as follows:

Location	Average Low/High Temperature
Miami International Airport	December/January: 60/77
SW Miami-Dade	December/January: 56/77
Fort Lauderdale Int'l	December/January: 62/77
Pembroke Pines	December/January: 59/77
Palm Beach Int'l	December/January: 58/75
Naples Municipal Airport	December/January: 55/75
Moore Haven	December/January: 53/74
LaBelle	December/January: 49/74

Significant temperature variability can occur this time of year due to cold fronts which periodically move through the region. This variability can be noted in both the record minimum and maximum temperatures for December 25<sup>th</sup> and January 1<sup>st</sup> (indicated below). The Thanksgiving period is usually milder than the late December/January time frame, but exact timing of cold fronts can result in colder temperatures during certain periods in November than in December/January.

Strong cold fronts followed by air masses of either arctic or polar in origin can affect South Florida during the holiday period, and some of the region's all-time coldest temperatures on record have occurred on or around December 25<sup>th</sup>. Examples of cold temperatures on Christmas Day include 1983 and 1989, when

temperatures dropped to near or below the freezing mark over virtually all of south Florida, with maximum temperatures only reaching the 40s. Although snow has never been recorded on Christmas Day in south Florida, frost did develop on Christmas morning 1989. Frost was noted on vehicles and rooftops all across south Florida, making that day about as close to a "White Christmas" as south Florida can expect.

Air masses following cold fronts this time of year normally result in low temperatures in the 40s or lower-50s, with high temperatures in the 60s to around 70. Cold air masses usually don't linger for too long due to the modifying effects of both the Atlantic Ocean and Gulf of Mexico, with temperatures returning to near normal values 3-5 days after the coldest readings.

Conversely, during warm periods, temperatures have also reached the 80s during the holidays, making some Thanksgiving, Christmas and New Year's Days feel almost like summer. This was the case during Christmas 2008 and 2009 when maximum temperatures reached the 80s over most of south Florida. Because of this variability in temperature, visitors are recommended to pack for both balmy and chilly weather.

Measureable precipitation (greater than 0.01 inches) falls on either December 25<sup>th</sup> or January 1<sup>st</sup> on a frequency of once every 3 to 6 years, depending on the location (see table below for exact values per location). Holiday season rainfall normally comes in association with cold fronts sweeping through the area, or from persistent and rather moist easterly winds blowing off the Atlantic Ocean. An example of rainfall with moist easterly winds occurred on Christmas Day 2008 when several south Florida locations received measureable rainfall, including over an inch (1.07) in West Palm Beach. Thunderstorms and severe weather are relatively rare during the holidays, but can accompany squall lines ahead of cold fronts.

Also, persistent and sometimes strong winds during this time of year can produce rip currents along both the southeast and southwest Florida coasts, and all beachgoers are strongly urged to check conditions before heading to the beach, as well as swim at guarded beaches.

Below are the all-time and top 5 coldest, warmest and wettest days for December 25<sup>th</sup> and January 1<sup>st</sup> for select South Florida sites. (NOTE: Time period of records are as follows: Miami since 1895 [1911 for precipitation], Fort Lauderdale since 1912, West Palm Beach since 1888, Naples since 1942 and Moore Haven since 1918).

#### **Record Daily Minimum Temperatures (Degrees F)**

Date	Location				
	Miami	Fort Lauderdale	West Palm Beach	Naples	Moore Haven
Dec 25	30 (1989)	29 (1989)	28 (1989)	28 (1989)	23 (1989)
Jan 1	36 (1918)	34 (1918, 1949)	39 (1981)	29 (2001)	35 (1918)

#### **Record Daily Maximum Temperatures (Degrees F)**

Date	Location				
	Miami	Fort	West Palm	Naples	Moore
		Lauderdale	Beach		Haven
Dec 25	85 (1897)	89 (1931)	87 (1940)	87 (1987)	85 (1998)
Jan 1	87 (1982)	86 (1982)	85 (1996)	86 (1983)	86 (1974)

## **Top 5 Coldest Average Daily Temperature (Degrees F)**

Date	Location				
	Miami	Fort Lauderdale	West Palm Beach	Naples	Moore Haven
Dec 25	42.5 (1989)	42.0 (1989)	41.0 (1983)	39.5 (1983)	32.0 (1989)
	44.0 (1983)	43.5 (1983)	41.5 (1989)	40.5 (1989)	37.5 (1983)
	44.5 (1906)	46.5 (1995)	43.5 (1906)	47.5 (1995)	43.0 (1995)
	49.5 (1995)	50.5 (1963)	46.0 (1995)	49.5 (1966)	44.5 (1929)
	52.5 (1963)	51.5 (1961)	49.5 (1963)	50.0 (1963)	47.0 (1963)

Jan 1	46.5 (1918)	49.0 (1949)	45.5 (1898)	51.0 (1949)	41.5 (2001)
	51.5 (1949)	50.5 (1918)	47.5 (1918)	53.5 (1984)	46.0 (1949)
	52.5 (1896)	52.5 (2001)	50.5 (1895)	54.0 (1981)	48.5 (1984)
	54.5 (2001)	53.0 (1940)	50.5 (2001)	55.0 (1946)	50.5 (1927)
	55.5 (1984)	57.0 (1981)	51.0 (1949)	55.0 (1956)	52.0 (1981)

Top 5 Warmest Average Daily Temperature (Degrees F)

Date	Location				
	Miami	Fort Lauderdale	West Palm Beach	Naples	Moore Haven
Dec 25	78.5 (1997)	79.0 (1997)	80.5 (1997)	80.0 (2006)	76.0 (1997)
	77.0 (1987)	78.5 (1926)	79.0 (1914)	77.0 (1997)	75.5 (1998)
	77.0 (2009)	77.5 (2008)	78.5 (1981)	77.0 (1987)	75.0 (2006)
	77.0 (1924)	77.5 (1953)	77.5 (1984)	76.0 (2008)	74.5 (1942)
	77.0 (1914)	77.0 (2011)	77.0 (1926)	76.0 (2002)	74.0 (2002)

Jan 1	78.5 (2003)	77.5 (1996)	78.0 (1996)	76.5 (1983)	74.5 (2008)
	78.0 (1982)	77.0 (1993)	76.5 (1952)	76.5 (1947)	74.0 (1974)
	77.5 (1996)	77.0 (1979)	76.5 (1947)	75.0 (2007)	74.0 (1947)
	77.5 (1983)	77.0 (1952)	76.0 (2007)	75.0 (2003)	73.5 (1982)
	77.5 (1947)	76.5 (1982)	76.0 (1983)	73.5 (1996)	73.0 (1991)

**Top 5 Wettest Days (Inches)** 

Date	Location				
	Miami	Fort Lauderdale	West Palm Beach	Naples	Moore Haven
Dec 25	1.17 (1915)	1.11 (1992)	1.60 (1949)	0.30 (1957)	0.40 (1993)
	0.61 (1949)	0.97 (1936)	1.07 (2008)	0.21 (1985)	0.38 (1949)
	0.49 (2002)	0.80 (1949)	0.50 (1990)	0.19 (1978)	0.31 (1978)
	0.49 (1993)	0.65 (1959)	0.45 (2006)	0.14 (1959)	0.24 (1941)
	0.43 (2006)	0.50 (1948)	0.41 (1959)	0.09 (1979)	0.16 (2004)

Frequency of Measurable Precipitation (at least .01 in) in years (once per X years):

3.9

3.3

3.2

5.4

4.8

Jan 1	1.87 (1931)	1.57 (1932)	1.58 (1993)	1.64 (2003)	1.95 (1987)
	1.45 (1993)	1.13 (1931)	0.55 (1992)	1.10 (1987)	1.75 (2003)
	0.66 (1972)	1.12 (1992)	0.40 (1958)	0.74 (2002)	1.68 (1932)
	0.54 (1987)	0.75 (1993)	0.23 (1983)	0.66 (2010)	0.34 (1977)
	0.45 (1932)	0.68 (1987)	0.15 (1962)	0.23 (1977)	0.25 (1928)

Frequency of Measurable Precipitation (at least .01 in) in years (once per X years):

4.4

3.9

4.6

7.1

5.1